

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Previously Presented) An oxide based mixture for forming a ceramic matrix comprising:

a sol gel comprising from about 10 wt% to about 25 wt% of metal oxide solids; and

alumina particles;

wherein the sol gel is mixed with said alumina particles to form a mixture including from about 40 wt% to about 70 wt% said sol gel and about 30 wt% to about 60 wt% of said mixture includes said alumina particles.

2. (Previously Presented) The mixture of Claim 1 wherein the sol gel is selected from the group consisting of alumina sol, alumina-coated silica sol and silica sol.

3. (Previously Presented) The mixture of Claim 2 wherein the ceramic comprises from about 0 wt% to about 33 wt% of the silica sol.

4. (Currently Amended) The mixture of Claim 3 wherein the ceramic comprises from about 5 wt% to about 10 wt% of the silica sol.

5. (Previously Presented) The mixture of Claim 1 wherein the alumina particles have a size of from about 0.1 μm to about 1.5 μm .

6. (Previously Presented) The mixture of Claim 1 wherein said mixture further comprises a filler material.

7. (Previously Presented) The mixture of Claim 6 wherein the filler material is a mullite.

8. - 22. (Cancelled)

23. (Previously Presented) The mixture of claim 1, wherein said sol gel includes a metal oxide content of about 12 weight percent to about 20 weight percent.

24. (Previously Presented) The mixture of claim 1, wherein said mixture includes more than about 50 weight percent of said alumina particles.